

WHY CAN WE COUNT?

BY JAMES D. NICKEL

Then He brought him outside and said, “Look now toward heaven, and count the stars if you are able to number them.” And He said to him, “So shall your descendants be” (Genesis 15:5).

And you shall count for yourselves from the day after the Sabbath, from the day that you brought the sheaf of the wave offering: seven Sabbaths shall be completed. Count fifty days to the day after the seventh Sabbath; then you shall offer a new grain offering to the LORD (Leviticus 23:15-16).

He counts the number of the stars; He calls them all by name (Psalm 147:4).

How precious also are Your thoughts to me, O God! How great is the sum of them! If I should count them, they would be more in number than the sand ... (Psalm 139:17-18).

But the very hairs of your head are all numbered (Matthew 10:30).

Although everyone counts, very few people understand the philosophical underpinnings that one must hold in order to “account” for counting. In order to count, one must embrace foundational truisms about the nature of reality (or metaphysics).

When unbelieving philosophers reject Christ and the Biblical Christian worldview, they tend to embrace one of two metaphysical extremes:

- (1) Radical monism or
- (2) Radical pluralism.

Monism means “all reality is made up of one entity” or “everything is unity” and pluralism means “all reality is made up of many entities” or “everything is diversity.”

Prefixing these words with the adjective *radical* absolutizes the definitions. *Absolutization* means that a belief is free from any limitation or restriction; i.e., this belief is the basis for understanding anything and everything.

The Greek philosopher Parmenides (ca. 450 BC) is an ancient example of radical monism. He stated that although it “appears” that reality changes (i.e., there is diversity), reality really does not change. Reality for him was a *single*, permanent substance that is uncreated, indestructible, and unchangeable. To him, all reality was made up of one entity called “reason.”

Eastern Hinduism is a modern example of radical monism. Hinduism, as a philosophy, states that there is no plurality, no diversity, and no change; it “looks” like there is plurality and change (e.g., there appears to be a change when someone hits you in the face) but it is a mere illusion (e.g., the blood flowing from your nose is not real). “All in one” is the mantra of the committed Hindu.

The problem with radical monism is that if all things are one, *then there can be no science and mathematics*. In order to do mathematics and science, *you must presuppose a philosophy of plurality or diversity*; i.e., that there are many things (philosophers call these many things *particulars*). As long as anyone attempts to explain everything *only* in terms of one unified principle or universal (e.g., nature, reason, logic, etc.), *then any remaining diversity will be a problem*.

The Greek philosopher Democritus (ca. 460-370 BC) is an ancient example of radical pluralism. He presupposed an atomistic theory of matter where everything is composed of infinitely many minute, invisible, indestructible particles of matter in its “purist” form. He also stated that these particles move about eternally in infinite empty space.

Only the Biblical Christian worldview can account for the ability to count.

Never absolutize the relative or relativize the absolute.

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The *nominalism*¹ or *empiricism* of Western civilization is a modern example of radical pluralism. *Only* individual objects or particulars have *real* existence; i.e., you can experience five dollars or five soft drinks, but you cannot “abstract” from these particular the experience of the universal concept of “fiveness.”²

Radical pluralism is problematic. First, with a pencil, write “5” on a piece of paper. Next, ask yourself, “Is this the number five?” According to the radical pluralism, you must answer “yes.” Now, erase “5” from your paper. Hence, “5” no longer exists! We all know that “V,” “////,” or “5” are numerals (symbols or names), not numbers. If *only* particulars exist, then the abstract concept of five does not exist. Has anyone ever experienced five, not five dollars or five soft drinks, but the abstract reality of five? No, because the universal “five” is a *different kind of metaphysical reality*.

With radical pluralism there is no concept of number, sets, classes, universals, patterns, connections, relationships, coherence (between man’s mind, the laws of logic, and the physical world), or laws. Hence, you *cannot* do mathematics. In order to do mathematics and science, *you must presuppose a philosophy of universals or unity*, i.e., that there is a unity of meaning and purpose to the many particulars of reality.

To summarize, if all is one (radical monism), then there are no particulars and no *number usage* (e.g., 5 inches, 5 cars, etc.). Hence, you *cannot* do mathematics (in the applied sense). If all is many (radical pluralism), then there are no universals and no *number* (e.g., you cannot discover a number or spatial pattern using induction or prove a particular conjecture about these patterns using deduction). Hence, you *cannot* do mathematics (in the abstract or pure sense).

Christian theologian Cornelius Van Til (1895-1987) comments on this conundrum:

... if one begins with an ultimate plurality in the world, or we may say regarding plurality as ultimate, there is no way of ever coming to an equally fundamental unity. On the other hand, if one should begin with the assumption of an ultimate abstract, impersonal unity, one cannot account for the fact of plurality. No system of thought can escape this dilemma. No system of thought has escaped this dilemma. Many systems of thought have denied one of the horns of the dilemma, but all that they have accomplished by doing this is to find relief in the policy of the ostrich.³

In order to do mathematics you must resolve the thorny metaphysical question of “unity and diversity,” “universals and particulars,” or “the one and the many.” This tension is resolved and answered in the Biblical revelation of the nature of the ontological⁴ Trinity, the eternal *One and the Many*. In the Trinity, the ultimate One and the Many (One God, Three Persons) is perfectly balanced and coordinated. The presuppositional starting point for a true understanding of the nature of the created reality (universals and particulars) is the nature of the Creator of that reality. We can do mathematics *only* because of the nature of the Triune God.⁵

Only Biblical Christianity can *account* for the ability to count. *Only* by the starting points of Biblical Christianity (*In the beginning, God ...*) can we account for and work with the balanced and coordinated interaction between universals and particulars, unity and diversity, the one and the many.

¹ Nominalism is the belief that general or abstract words do not stand for objectively existing things and that universals are nothing more than *names* assigned to them.

² Radical pluralism is in much of the extreme philosophies of modern science (e.g., positivism: what is true is only what we can observe with the sense via experiments), but minds “not prone to slumber” do recognize that generalities (or universals in the form of scientific law) are necessary if one actually wants to do science.

³ Cornelius Van Til, *A Survey of Christian Epistemology* (Phillipsburg: Presbyterian and Reformed, 1969), p. 47.

⁴ Ontology means the “study of the nature of existence.” Ontology is a branch of metaphysics.

⁵ I must emphasize that the worldview of Biblical Christianity (i.e., the proximate “unity in diversity” of the created order is accounted for by the ultimate “Unity and Diversity,” the Triune God) justifies a balanced coordination between: (1) applied mathematics (using the particulars) and (2) pure mathematics (using the universals). The Bible’s revelation of the foundational nature of God (Triune) unifies what unbelieving philosophers of mathematics commonly separate: pure vs. applied mathematics.